

MECHATRONICS BOOK SERIES

CONTROL AND INTELLIGENT SYSTEMS

Momoh Jimoh E. Salami
Abiodun Musa Aibinu
Yasir Mohd Mustafah



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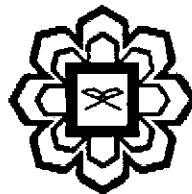
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EDITOR

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Chapter 25

Development of an Intelligent Laundry System

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25.1 Introduction

The process of doing laundry has always been a tiresome process even for those in the laundry business. This is because there are many tasks to be taken care of such as sorting, washing, drying, ironing and folding which requires human supervision, interaction and patience. Although machines are used intensively in these processes, separate laundry processes are not interconnected by machines but rather human energy is used.

Such intelligent laundry design that would integrate the different laundry processes might have been created before but probably not marketed because a tracking system capable of sorting different clothing and the way each different cloth is washed, dried or even ironed was in its early stages of development and not intensively used.

This system is hopefully useful in institutions such as those that require a constant flow of clean linen, working-clothing or uniform, such as Hospitals, prisons, hotels and especially laundry shops. The added benefit is they can overcome human labor insufficiency.

Hectic lifestyle schedules make people living in such metropolitan city as Kuala Lumpur tends to send their laundry to laundry shops. Through some observations in laundry shops throughout Kuala Lumpur, the demand in using laundry shops services never showed any sign that this business will fold up, yet the demand make a trend of many new laundry shops. Time has always been a constraint in any job process including laundry chores. Laundry process includes many steps such as sorting types of fabrics, washing, drying, ironing and folding. Through this paper, the main concern will lie on the process of sorting different types of fabrics.

Sorting process is actually an important part in conventional ways of doing laundry, nevertheless it is a process that people tend to skip because of its difficult and time consuming nature. For example, to sort a shirt that is green, blue, white, dark yellow etc or linen, wool, cotton etc needs manual sorting process before it goes for separate washing. The sorting process that is being skipped by the laundry shop leave the workers of laundry shops with the hope for an automatic system to ease their tasks in doing the sorting process..

Apart from the sorting process, ironing process is also a time consuming work to be completed by those who do the laundry. In laundry shop for an instance, the amount of shirts, trousers etc are always mounted in numbers and needed committed workers to complete all the customers' laundry. It is a dream for every laundry worker to have a machine that can help them in lessening the workload.

25.2 Literature Review

Intelligent system can be defined as a system that has its own processing capability. Laundry means clothes and household linen that need to be washed or that have been newly washed. System in other word means a complex whole, a set of things working together as a mechanism or interconnecting network. Thus, intelligent laundry system is what we refer to as a system that is developed and able to do all the processes of laundry automatically without much human intervention.